

**Amendments to the Claims:**

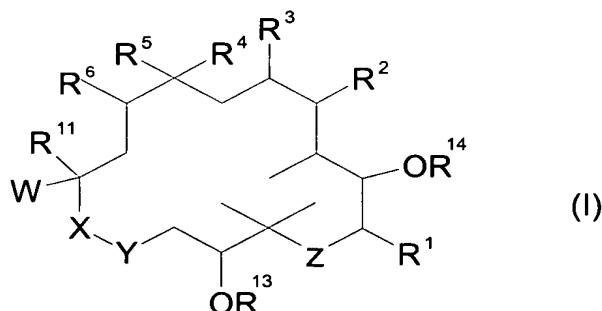
The following listing of claims will replace all prior versions, and listings, of claims in the application:

1–14. (Cancelled)

15. (Previously Presented) Method of treatment of a disease involving a neuronal connectivity defect comprising administering to an individual in need thereof a therapeutic effective amount of an epothilone or pharmaceutically acceptable salt thereof.

16. (Previously Presented) Method according to claim 15, wherein the disease is a psychotic or psychiatric disorder.

17. (Previously Presented) Method according to claim 15, wherein the epothilone is a compound of formula (I) or a pharmaceutically acceptable salt thereof:



wherein:

R<sup>1</sup> represents H, alkyl, alkenyl or alkynyl in C<sub>1</sub>-C<sub>6</sub>, aryl in C<sub>6</sub>-C<sub>10</sub>, or aralkyl in C<sub>7</sub>-C<sub>15</sub>,

R<sup>2</sup>, R<sup>3</sup> each represents H or form together a C=C double bond,

R<sup>4</sup> represents H, a C<sub>1</sub>-C<sub>6</sub>-alkyl, or a fluoro substituted C<sub>1</sub>-C<sub>6</sub> alkyl,

R<sup>5</sup> and R<sup>6</sup> form a C=C double bond or a three-member ring including O, S, NR<sup>7</sup>, or CR<sup>8</sup>R<sup>9</sup> where:

R<sup>7</sup> is C(O)R<sup>10</sup> or SO<sub>2</sub>R<sup>10</sup>, and

$R^8$ ,  $R^9$ , and  $R^{10}$  each independently represent H, a halogen, a C<sub>1</sub>-C<sub>6</sub> alkyl, a C<sub>6</sub>-C<sub>10</sub> aryl, or a C<sub>7</sub>-C<sub>15</sub> alkaryl,

$R^{11}$  represents H, a C<sub>1</sub>-C<sub>6</sub> alkyl, a C<sub>6</sub>-C<sub>10</sub> aryl, or a C<sub>7</sub>-C<sub>15</sub> alkaryl,

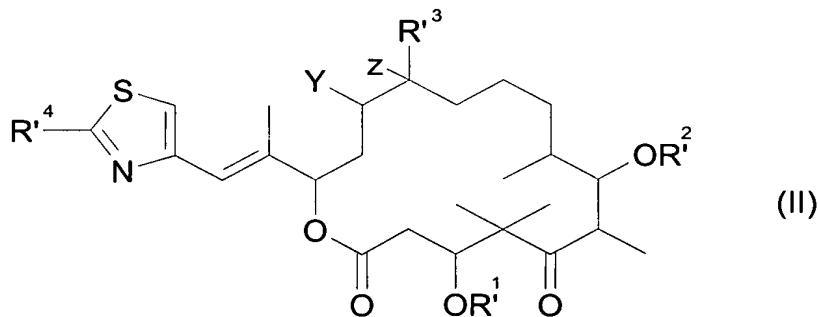
W represents C(R<sup>12</sup>)=CH, C(R<sup>12</sup>)=C(CH<sub>3</sub>), C(R<sup>12</sup>)=CF or a bicyclic aromatic/heteroaromatic radical, with R<sup>12</sup> representing a heteroaromatic radical,

X-Y represents O-C(=O), O-CH<sub>2</sub>, CH<sub>2</sub>-O, or CH<sub>2</sub>-C(=O),

Z represents C=O, S, S=O, or SO<sub>2</sub>, and

$R^{13}$  and  $R^{14}$  represents independently from each other H, C<sub>1</sub>-C<sub>6</sub>-alkyl, (CO)R<sup>15</sup>, or C<sub>1</sub>-C<sub>4</sub>-trialkylsilyl, with R<sup>15</sup> being H, a C<sub>1</sub>-C<sub>6</sub>-alkyl, or a fluoro substituted C<sub>1</sub>-C<sub>6</sub>-alkyl.

18. (Previously Presented) Method according to claim 15, wherein the epothilone is a compound of following formula (II) or a pharmaceutically acceptable salt thereof:



wherein:

$R'^4$  represents a C<sub>1</sub>-C<sub>6</sub> alkyl or substituted C<sub>1</sub>-C<sub>6</sub> alkyl with substituents selected from the group consisting of F, Cl, Br, I, -NCO, -NCS, -N<sub>3</sub>, NH<sub>2</sub>, OH, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, and O-benzoyl,

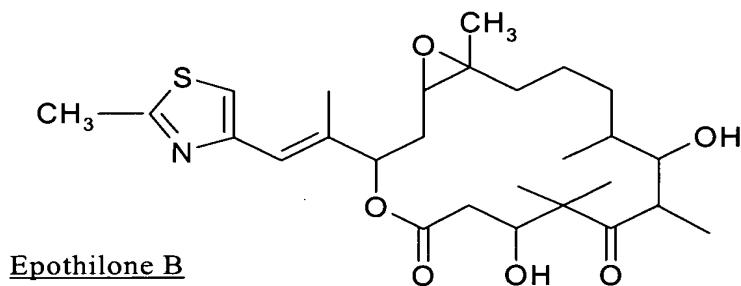
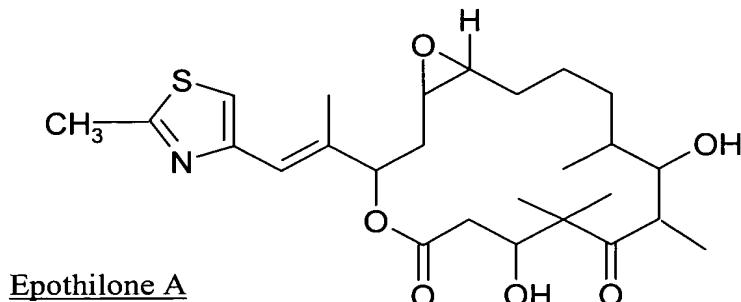
$R'^1$  and  $R'^2$  are independently from each other H, a C<sub>1</sub>-C<sub>6</sub>-alkyl, (CO)R'<sup>5</sup> with R'<sup>5</sup> being H, a C<sub>1</sub>-C<sub>6</sub>-alkyl, a C<sub>1</sub>-C<sub>6</sub>-fluoroalkyl, or a C<sub>1</sub>-C<sub>4</sub>-trialkylsilyl,

$R'^3$  represents H, C<sub>1</sub>-C<sub>6</sub>-alkyl, or a halogen substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, and

Y and Z form either a C=C double bond or are an O atom of an epoxide.

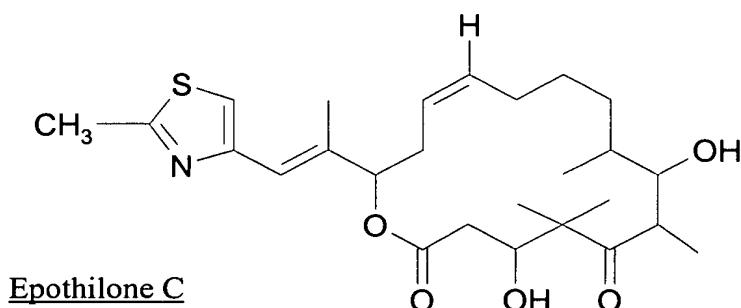
19. (Previously Presented) Method according to claim 18, wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> represents independently from each other, H, a C<sub>1</sub>-C<sub>6</sub>-alkyl, or a C<sub>1</sub>-C<sub>6</sub> fluoroalkyl.

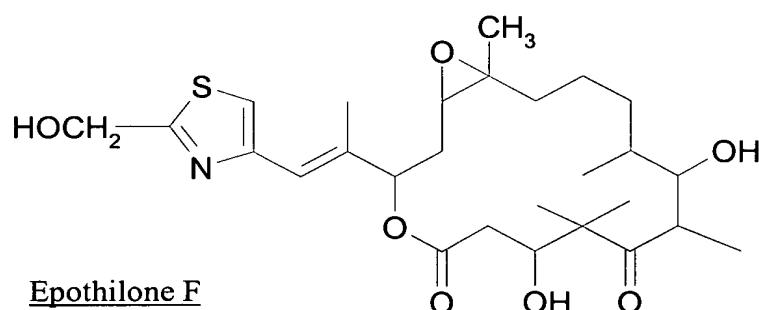
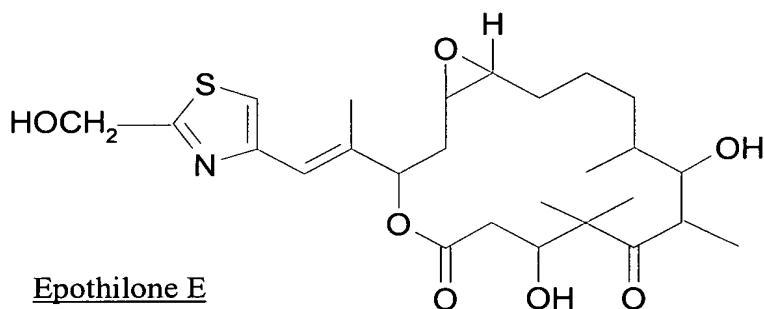
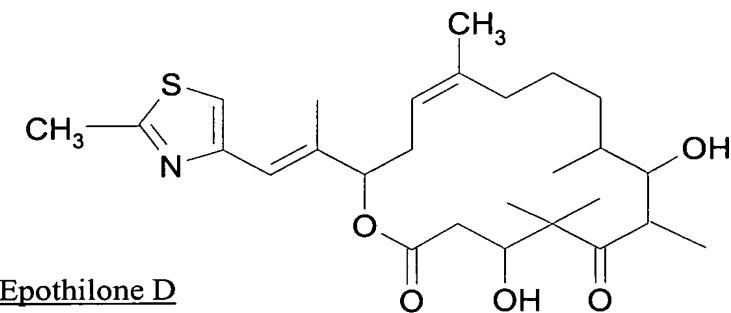
20. (Previously Presented) Method according to claim 15, wherein epothilone is at least a natural epothilone A or B represented by the following structural formulas:



or a pharmaceutically acceptable salt thereof.

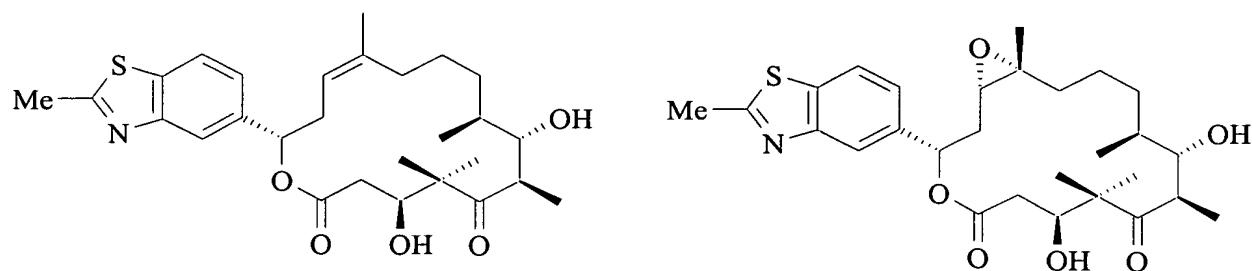
21. (Previously Presented) Method according to claim 15, wherein epothilone is at least one synthetic epothilone C, D, E or F represented by the following structural formulas:

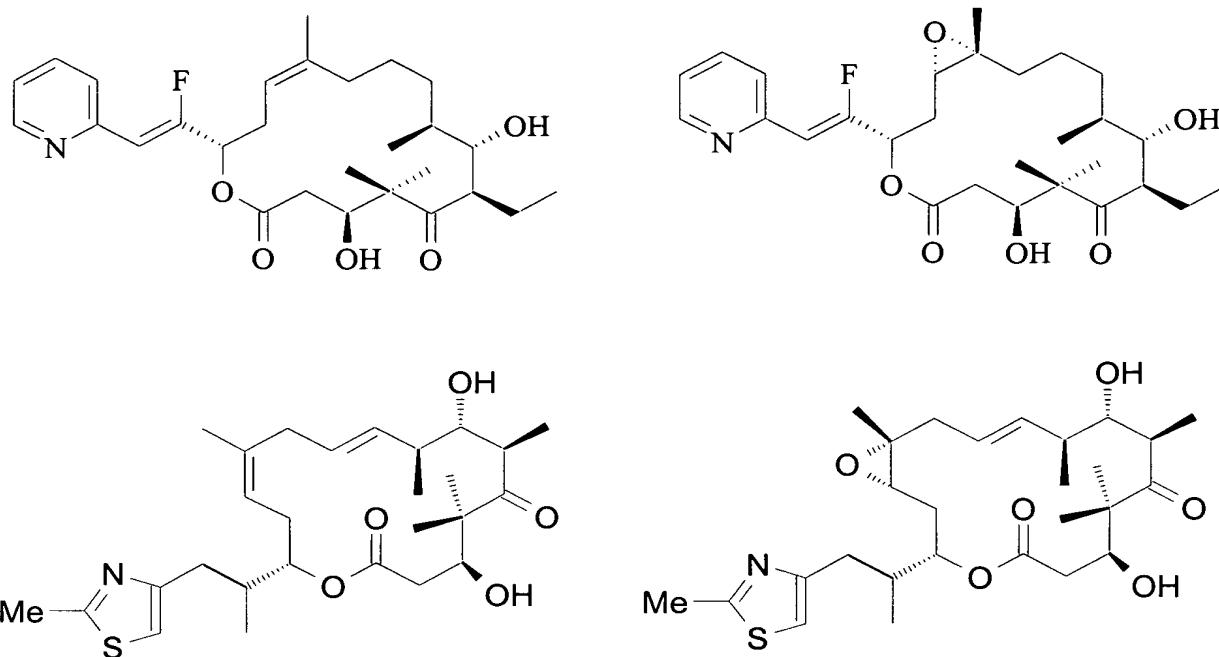




and pharmaceutically acceptable salts thereof.

22. (Previously Presented) Method according to claim 15, wherein epothilone is at least one synthetic epothilone represented by the following structural formulas:





23 (Previously Presented) Method according to any claim 15, wherein the epothilone or pharmaceutically acceptable salt thereof is used at a therapeutically effective amount from 0.01 mg/Kg/dose to 100 mg/Kg/dose.

24. (Previously Presented) Method according to claim 15, wherein the epothilone or pharmaceutically acceptable salt thereof is administered in a pharmaceutical composition comprising at least a pharmaceutically acceptable carrier.

25. (Previously Presented) Method according to claim 15, wherein the epothilone is synthetic epothilone D or a pharmaceutical salt thereof.

26. (New) Method according to claim 17, wherein R<sup>4</sup> represents CH<sub>3</sub>, CF<sub>3</sub>, or CFH<sub>2</sub>.

27. (New) Method according to claim 17, wherein R<sup>11</sup> represents H.

28. (New) Method according to claim 26, wherein R<sup>11</sup> represents H.

29. (New) Method according to claim 17, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

30. (New) Method according to claim 26, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

31. (New) Method according to claim 27, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

32. (New) Method according to claim 28, wherein W represents a 2-methylbenzothiazol-5-yl radical, a 2-methylbenzoxazol-5-yl radical, or a quinolin-7-yl radical.

33. (New) Method according to claim 17, wherein W represents  $C(R^{12})=CH$ ,  $C(R^{12})=C(CH_3)$ , or  $C(R^{12})=CF$ , where  $R^{12}$  represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

$C_1-C_6$  alkyl,

CN,

$N_3$ ,

$S-C_1-C_4$ -alkyl,

$O-C_1-C_6$ -alkyl, or

$C_1-C_6$ -alkyl substituted by OH, amino, halogen,  $-NCO$ ,  $-NCS$ ,  $-N_3$ , O-( $C_1-C_6$ )-acyl, O-( $C_1-C_6$ )-alkyl, or O-benzoyl.

34. (New) Method according to claim 26, wherein W represents  $C(R^{12})=CH$ ,  $C(R^{12})=C(CH_3)$ , or  $C(R^{12})=CF$ , where  $R^{12}$  represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,  
CN,  
N<sub>3</sub>,  
S-C<sub>1</sub>-C<sub>4</sub>-alkyl,  
O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or  
C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS,  
-N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

35. (New) Method according to claim 27, wherein W represents C(R<sup>12</sup>)=CH,  
C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,  
CN,  
N<sub>3</sub>,  
S-C<sub>1</sub>-C<sub>4</sub>-alkyl,  
O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or  
C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS,  
-N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

36. (New) Method according to claim 28, wherein W represents C(R<sup>12</sup>)=CH,  
C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,  
CN,  
N<sub>3</sub>,  
S-C<sub>1</sub>-C<sub>4</sub>-alkyl,  
O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or

C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS, -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

37. (New) Method according to claim 17, wherein W represents C(R<sup>12</sup>)=CH, C(R<sup>12</sup>)=C(CH<sub>3</sub>), or C(R<sup>12</sup>)=CF, where R<sup>12</sup> represents a 2-pyridinyl, a 2-substituted thiazol-4-yl, or a 2-substituted oxazol-4-yl radical with substitution in the 2-position by

C<sub>1</sub>-C<sub>6</sub> alkyl,

CN,

N<sub>3</sub>,

S-C<sub>1</sub>-C<sub>4</sub>-alkyl,

O-C<sub>1</sub>-C<sub>6</sub>-alkyl, or

C<sub>1</sub>-C<sub>6</sub>-alkyl substituted by OH, amino, halogen, -NCO, -NCS, -N<sub>3</sub>, O-(C<sub>1</sub>-C<sub>6</sub>)-acyl, O-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or O-benzoyl.

38. (New) Method according to claim 19, wherein R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> each represents independently from each other H, CH<sub>3</sub>, or CF<sub>3</sub>.